



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

February 14, 2018

Dear Colleagues:

SUBJECT: 2018 COOPERATIVE SEVERE ACCIDENT RESEARCH PROGRAM (CSARP), MELCOR CODE ASSESSMENT PROGRAM TECHNICAL REVIEW MEETINGS (MCAP), MELCOR USER WORKSHOP, INTERNATIONAL MELCOR ACCIDENT CONSEQUENCE CODE SYSTEM (MACCS) USER GROUP (IMUG) MEETING, AND MACCS USER WORKSHOP

The next Cooperative Severe Accident Research Program (CSARP) technical review meeting, MELCOR Code Assessment Program (MCAP) meeting, MELCOR User Workshop, International MELCOR Accident Consequence Code System (MACCS) User Group (IMUG) meeting, and MACCS User Workshop will be held in June 2018 at the North Bethesda Marriott in Rockville, Maryland. The dates for the five meetings are as follows:

- CSARP Technical Review Meeting: June 5-7, 2018
- MCAP Meeting: June 7-8, 2018
- MELCOR User Workshop: June 11-15, 2018
- IMUG Meeting: June 11-12, 2018
- MACCS User Workshop: June 13-15, 2018

A preliminary program plan for the CSARP and MCAP meetings is enclosed. We are sending this preliminary announcement and the program plan to you as the principal CSARP representative of your country, and ask you to send us titles and authorship information for technical presentations that your organization as well as other organizations in your country, plan to make at any of these meetings. A response from you on or before April 30, 2018, will be appreciated. This will help us develop a preliminary agenda for the meetings in a timely manner. A preliminary agenda for the MELCOR workshop is attached.

The IMUG program plan is enclosed. The meeting is a forum for the exchange of information and research experience among users of the MACCS code. We are asking you to send us titles and authorship information for technical presentations that your organization as well as other organizations in your country, plan to make at the meeting. A response from you on or before April 30, 2018, will be appreciated. This will help us develop a preliminary agenda for the meetings in a timely manner. Topics for presentation are expected to cover the full spectrum of nuclear accident consequence analysis (atmospheric transport, protective actions, health effects, economic consequences). Topics are not limited to just the MACCS code; presentations are welcome for work using other nuclear accident consequence codes. A preliminary agenda for the MACCS User Workshop is attached. All workshop attendees should bring their own laptop and have installed MACCS Version 3.10.1.2/WinMACCS Version 3.10.0. If needed, request MACCS via email to MACCScodes@nrc.gov at least two months in advance.

For up to date information and **to register for the meetings**, please go to <http://energyworkshops.sandia.gov/nuclear/2018-melcor-csarp-mcap-imug-maccs-meetings/>

NOTE: You may need to use a different browser such as Firefox if you have trouble loading the page with your version of Internet Explorer. At the conference, we will make the presentations available for download. In order for us to be able to do that, we ask that you send electronic copies of your presentation materials (viewgraphs) in portable document file (pdf) format to Sandia National Laboratories (attention: Ms. Sonya Mahler at smahler@sandia.gov, tel. 1-505-844-8033) by **no later than May 14, 2018**.

HOTEL RESERVATIONS

A block of rooms at a special conference and per diem rate (\$253/night plus applicable taxes) has been set aside at the North Bethesda Marriott, 5701 Marinelli Road, Rockville, MD 20852. The cutoff date for room reservation at this cost is April 30, 2018. Reservations can be made directly with reservations at 1-301-822-9200 (hotel directly), 1-800-266-9432 (toll free) using a credit card. Guests should identify themselves as part of the CSARP MCAP MELCOR IMUG Meeting 2018 Room Block. There is no cancellation penalty if the reservation is canceled before 6:00 p.m. on the first night of stay. Otherwise, there will be a penalty of one night's room rate plus applicable tax. The special room rate is valid from Saturday, June 2, 2018 through Sunday, June 16, 2018. The hotel parking rates are \$20 overnight per day and \$15 daily rate per day.

The web site for the hotel is: <http://www.marriott.com/hotels/travel/wasbn-bethesda-north-marriott-hotel-and-conference-center/>.

To make reservations on-line please go to <https://aws.passkey.com/e/49593592>

Other area hotels where reservation can be made directly by the guests are listed below. These hotels offer U.S. government rates but not special conference rates.

- Bethesda Marriott – 301-897-9400
- EVEN Hotel Rockville – 301-881-3836
- Hilton Washington DC/Rockville – 301-468-1100
- Best Western Plus Rockville – 301-424-4940

As in previous years, we plan to organize a group dinner one evening during the CSARP meeting. Information about the group dinner and other social events in the area will be available at the registration desk. Also, note that Sandia will be providing administrative and coordination support for the CSARP, MCAP, and IMUG meetings, and the MELCOR, and MACCS workshops. For assistance in related matters, please contact Ms. Sonya Mahler.

We look forward to seeing you at the meetings.

Sincerely,



Richard Lee, Chief
Fuel & Source Term Code Development Branch
Division of Systems Analysis
Office of Nuclear Regulatory Research



Patricia Santiago, Chief
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**Cooperative Severe Accident Research Program (CSARP)
Technical Review Meeting
MELCOR Code Assessment Program (MCAP) Meeting
June 5-8, 2018
Preliminary Program Plan**

Tuesday, June 5

CSARP Registration
Introduction/Opening Remarks

Overview Session
Technical Session 1 – Severe Accident Research Programs
Technical Session 2 – Severe Accident Research Activities

Wednesday, June 6

Technical Session 3 – Severe Accident Research: Codes & Experiments
Technical Session 4 – Reactor and Spent Fuel Pool Analysis

Thursday, June 7 (AM)

Technical Session 5 – Special Topics (e.g., ATF & non-LWR Applications)
Partners' Meeting
CSARP Meeting Adjournment

Thursday, June 7 (PM)

MCAP Registration
Introduction/Opening Remarks
Technical Session 1 – MELCOR Applications and Assessment I

Friday, June 8

Technical Session 2 – MELCOR Applications and Assessment II
MCAP Meeting Adjournment

2018 MELCOR Users' Workshop
June 11-15, 2018
Preliminary Agenda

Monday June 11, 2018

AM Registration, Introduction, MELCOR Overview,
Getting Started with MELCOR
PM SNAP, other MELCOR I/O Tools

Tuesday June 12, 2018

AM CVH/FL package
PM Data & Control, Containment Models

Wednesday June 13, 2018

AM Heat Structure (HS) package
PM Vapor & Aerosols, COR package modeling

Thursday June 14, 2018

AM Core Degradation, CAV/RN Package
PM DCH package, Special Topics

Friday June 15, 2018

AM Special Topics
PM Special Topics

**International MACCS User Group (IMUG) Meeting
June 11-12, 2018
Preliminary Program Plan**

The following technical sessions are proposed for the 2018 IMUG meeting. They will be finalized after we receive proposals from the participants and then we will issue an agenda with confirmed presentations and topics. The presentations can cover any technical element related to the modeling of nuclear offsite consequences and can include research efforts, benchmarking, modeling improvements, uncertainty evaluations, or modeling applications. Presentations are welcome that use MACCS as well as other offsite consequence models and tools. This plan will be finalized after considering your submittals and presentation suggestions.

Monday, June 11, 2018

- IMUG Registration
- Introduction/Opening Remarks
- Technical Session 1 – MACCS Code Suite Development Status
- Technical Session 2 – Severe Accident Consequence Modeling Applications
- Technical Session 3 – Atmospheric Transport and Dispersion
- Technical Session 4 – Severe Accident Consequence Modeling – TBD
- Possible tour of NRC Emergency Operations Center - TBD

Tuesday, June 12, 2018

- Technical Session 5 – Emergency Response Research and Modeling
- Technical Session 6 – Recent Benchmarking of Consequence Models
- Technical Session 7 – Economic Consequences
- Technical Session 8 – Severe Accident Consequence Modeling – TBD
- Possible tour of NRC Emergency Operations Center - TBD

MACCS User Workshop
June 13-15, 2018
Preliminary Program Plan

Wednesday, June 13

- MACCS Workshop Registration
- Introduction/Opening Remarks
- MACCS Model Overview
- Atmospheric Transport and Dispersion Modeling Including Gaussian Plume Segment Model, Wake Effects, Plume Rise, Plume Meander, Dry and Wet Deposition, and Treatment of Meteorology
- Exercises
- Emergency Phase Exposure Pathways and Modeling of Protective Actions Including Evacuation, Relocation, and Sheltering
- Exercises
- Adjourn

Thursday, June 14

- Intermediate Phase and Long-Term Phase Exposure Pathways and Modeling of Protective Actions Including Relocation, Decontamination, and Condemnation
- Exercises
- Modeling of Dose and Early and Latent Health Effects
- Exercises
- Modeling of Land Contamination and Economic Consequences
- Exercises
- Adjourn

Friday, June 15

- Site-Specific Population, Economic, and Land Use Modeling Using the SecPop Preprocessor Code
- Radionuclide Release Modeling of Source Terms in MACCS Using the MelMACCS Preprocessor Code
- Recent Updates and Planned Enhancements to MACCS
- Exercises
- Closing Remarks/Announcements
- Adjourn mid-day